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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 10/10/2008

Dr. Daniel P. Morris, Esq.
IBM Corporation
Intellectual Property Law Department
P.O. Box 218
Yorktown Heights, NY 10598

EXAMINER

HO, HOANG QUAN TRAN

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 10/10/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,890	12/16/2003	Brian Samuel Beaman	YOR919970349US4	5741

TITLE OF INVENTION: ANGLED FLYING LEAD WIRE BONDING PROCESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/12/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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7590 10/10/2008

Dr. Daniel P. Morris, Esq.
 IBM Corporation
 Intellectual Property Law Department
 P.O. Box 218
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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/12/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
HO, HOANG QUAN TRAN	2818	257-784000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
<input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____

(B) RESIDENCE: (CITY AND STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
<input type="checkbox"/> Issue Fee	<input type="checkbox"/> A check is enclosed.
<input type="checkbox"/> Publication Fee (No small entity discount permitted)	<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.
<input type="checkbox"/> Advance Order - # of Copies _____	<input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)	<input type="checkbox"/> a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.	<input type="checkbox"/> b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).
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NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS; SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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7590	10/10/2008			
Dr. Daniel P. Morris, Esq. IBM Corporation Intellectual Property Law Department P.O. Box 218 Yorktown Heights, NY 10598				EXAMINER HO, HOANG QUAN TRAN
				ART UNIT 2818
				PAPER NUMBER DATE MAILED: 10/10/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 372 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 372 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No. 10/736,890	Applicant(s) BEAMAN ET AL.
	Examiner Hoang-Quan T. Ho	Art Unit 2818

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 7/31/08.
- The allowed claim(s) is/are 1-7, 9, 11, 12, 14, 15 and 17-33.

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of the:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20080930.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|--|---|

DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims, filed on June 25, 2008, is acknowledged. Entry of amendment is accepted and made of record. Currently, claims 1 – 31 are pending in light of the amendment, in which: claims 1, 5, 8 – 12, 20 – 21, 28, and 30 – 31 were amended; no claim was cancelled; claim 26 was withdrawn; and no claim was added.

Applicant's amendment to the drawings, filed on June 25, 2008, is acknowledged. Entry of amendment is accepted and made of record.

Applicant's amendment to the specification, filed on June 25, 2008 and July 31, 2008 are acknowledged. Entry of amendments are accepted and made of record.

Response to Arguments/Remarks

Applicant's response filed on June 25, 2008 is acknowledged and is answered as follows.

Applicant's remarks, see pg. 8, with regards to the objection of fig. 1 have been fully considered. Applicant failed to remedy fig. 1 objection (e.g., amend fig. 1 to designate it as prior art). Applicant contested, see pg. 8 of remarks, that the Examiner did not give any reason for objecting fig. 1. The Examiner respectfully disagrees. Applicant may have overlooked the Office Action mailed out on February, 8, 2008, on pgs. 2 - 3, for which the Examiner has stated the following reason: "For support, see

instant application's specification in U.S. Pat. App. Pub. No. 2004/0148773, at par. 0004 and 0010".

Applicant's remarks, see pg. 8, with respect to objections of figs. 2 and 15 – 16 have been fully considered and has rendered the objections moot.

Applicant's remarks, see pgs. 8 – 9, with respect to the objections of claims 2 – 31 have been fully considered and persuasive. Therefore, the objections are withdrawn.

Applicant's arguments, see pgs. 9 – 11, with respect to the rejections have been fully considered and are persuasive. Therefore, the rejections have been rendered moot.

Election/Restrictions

Claims 1, 5, 14 – 15 and 32 – 33 are allowable as indicated below. The restriction requirement between Inventions I and II, as set forth in the Office action mailed on January 25, 2007, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). **The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.** Claim 26, directed to Invention II no longer withdrawn from consideration because the claim(s) requires all the limitations of an allowable claim.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present

application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel Morris on September 30, 2008.

The application has been amended as follows:

Replace claim 1 with: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

 said flying lead wire structures are bonded to a first surface of said electronic circuit component; said wire structures comprise a desired shape in said flying lead wire; said flying lead wire structures having wire tip ends comprising a shear blade cut end;

said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support; and

wherein said flexible support is selected from the group consisting of a spring and an elastomeric material.

Replace claim 5 with: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

said flying lead wire structures are bonded to a first surface of said electronic circuit component; said flying lead wire structures comprise a desired shape in said flying lead wire structures; wire tip ends comprising a small nick on opposite sides of said wires;

said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support; and

wherein said flexible support is selected from the group consisting of a spring and an elastomeric material.

Replace claim 14 with: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

 said flying lead wire structures are bonded to a first surface of said electronic circuit component; said wire structures comprise a desired shape in said flying lead wire; said flying lead wire structures having wire tip ends comprising a shear blade cut end;

 said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

 wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support;

 wherein a space between said surface of the electronic component and said sheet is filled with a compliant medium; and

 wherein said the compliant medium is an elastomeric material.

Replace claim 15 with: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

 said flying lead wire structures are bonded to a first surface of said electronic circuit component; said wire structures comprise a desired shape in said flying lead wire; said flying lead wire structures having wire tip ends comprising a shear blade cut end;

said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support;

wherein a space between said surface of the electronic component and said sheet is filled with a compliant medium; and

wherein said the compliant medium is a foamed polymer material.

Add claim 32: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

said flying lead wire structures are bonded to a first surface of said electronic circuit component; said flying lead wire structures comprise a desired shape in said flying lead wire structures; wire tip ends comprising a small nick on opposite sides of said wires;

said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support;

wherein a space between said surface of the electronic component and said sheet is filled with a compliant medium; and

wherein said the compliant medium is an elastomeric material.

Add claim 33: A structure comprising flying lead wire structures attached to an electronic circuit component comprising:

 said flying lead wire structures are bonded to a first surface of said electronic circuit component; said flying lead wire structures comprise a desired shape in said flying lead wire structures; wire tip ends comprising a small nick on opposite sides of said wires;

 said flying lead wires further comprise disposed in a predetermined position a sheet of material having a plurality of openings therein through which said flying lead wires project;

 wherein said sheet is spaced apart from said first surface of said electronic component by a flexible support;

 wherein a space between said surface of the electronic component and said sheet is filled with a compliant medium;

 wherein said the compliant medium is a foamed polymer material.

Cancel claims 8, 10, 13, and 16.

Claims 9 – 12, 17 – 21 and 26: Replace the dependency of each claim from "according to claim 8" to --according to anyone of claims 1, 5, 14, 15, 32 or 33--.

Claim 19: Delete the limitation "angle" in line 1 and replace the limitation "wire" with --wires-- in line 2.

Claim 26: Replace the limitation "said electronic device" with --an electronic device-- in line 3.

Allowable Subject Matter

Claims 1 – 7, 9, 11 – 12, 14 – 15, and 17 – 33 are allowed.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The cited art, whether taken singularly or in combination, especially when all limitations are considered within the claimed specific combination, fails to teach or render obvious:

Claims 1 and 5: *Inter alia*, wherein said flexible support is selected from the group consisting of a spring and an elastomeric material.

Claims 14 and 32: *Inter alia*, wherein said the compliant medium is an elastomeric material.

Claims 15 and 33: *Inter alia*, wherein said the compliant medium is a foamed polymer material.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Quan T. Ho whose telephone number is 571-272-8711. The examiner can normally be reached on Monday - Friday, 9 AM - 5 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on 571-272-1657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2818

Hoang-Quan Ho
Examiner, Art Unit 2818
September 30, 2008

/Andy Huynh/
Primary Examiner, Art Unit 2818